**2.0 LITERATURE REVIEW**

INCOMPLETE CONSTRUCTION

Researchers agree that construction industry always faces the problems of incomplete construction. These studies discuss common and general causes of incomplete construction in construction projects (Sambasivan & Yau, 2006; Kuperman & Kirillova, 1969; Staveven, 2006; Abdul Kadir, Lee, Jaafar, Sapuan & Ali, 2005; Aibinu & Jagboro, 2002;  Ogunlana & Jearkjirm, 1996; Kumaraswamy & Chan, 1998; Assaf, Al-Khalil & Al-Hazmi, 1995; Mansfield, Ugwu & Doran, 1994). According to Sambasivan and Yau (2006), there is lack of communication among the construction practitioners. Same with Kumaraswamy & Chan (1998) that agree there is lack of effective communication. The results of a study by Sambasivan and Yau (2006) echo Assaf et al., (1995), had the financial problem. The clients also make problem in payment, where they delay the payment to the contractors. Besides that, in the research of Sambasivan and Yau (2006), there is poor client’s finance and late payment.

According to Ogunlana & Jearkjirm (1996), they concluded that the troubles of the construction industry in developing economies could be nested in three layers: (1) problem of shortages or inadequacies in industry infrastructure, mainly supply of resources; (2) problems caused by clients and consultants; and (3) problems caused by incompetence of contractors. The results of a study by Kumaraswamy & Chan (1998) echo Ogunlana’s finding. They surveyed the factors of incomplete construction in Hong Kong as seen by clients, contractors and consultants, and observed the factors affecting productivity. The survey showed variation in perceptions of the relative significance of factors between the three groups, indicative of their experiences, likely prejudices and lack of effective communication.

According to Assaf et al., (1995), the important cause including approval of shop drawings, delays in payments to contractors and the resulting cash-flow problems during construction, design changes, conflicts in work schedules of subcontractors, slow decision making and executive bureaucracy in the owners' organizations, design errors, labor shortage   
and inadequate labour skills. Likewise, Mansfield et al., (1994) studied the cause of cost overrun in construction projects in Nigeria. The results revealed that the factors are poor contract management, changes in site conditions and improper planning.

Abdul Kadir et al., (2005) found that the lack of material at project site is the most critical factor in incomplete construction. In Mansfield et al., (1994) studied also found that shortage of material is one of the factors in incomplete construction. For example, when the material does not arrived at site on time, it will make the workers often idle waiting for the material and time overrun will occur. Other than that, the financial problem can occur many problems such the stoppage material delivery to site, and hinder the work progress. Sometimes, the change in order might occur maybe because of the design error or the clients want to change the design. Actually, it will affect the cost and also duration. That is why incomplete construction always occurs.

Similarly, Aibinu and Jagboro (2002) found shortage of materials and poor contract management will effect the project construction. The poor contract management on planning, scheduling and material management will slow the progress of construction and elongated the project duration. When there are poor knowledge and inexperience in planning and scheduling, the work programme will not flow smoothly. William, Nguyen and Simonian (2010) observe the same factor as Abdul Kadir et al., (2005), which is late submission of the drawings and material lists needed by the subcontract. Besides, when there are some conflict between a contractor and subcontractor, the work progress cannot be continued and this will result in time overrun.

Sambasivan and Yau (2006) found that eight out of ten factors came from the contractors which include the improper planning at the initial stages, poor site management that give contradictory impact on the inclusive course of work, the inadequate experience of them that brings to devastating effects, problems with subcontractors, shortage in material, shortage in labour, have no available equipments required in construction that leads to overall failure as well as mistakes occurs during the construction stage. The other factors would be poor client’s finance and late payments for completed work and also lack of communication between construction practitioners. As stated by Staveren (2006), low morale of human behavior such as fraud and doing crime like corruption as well as one acknowledged by Kuperman and Kirillova (1969), reported that critical climatic predicament, also contribute to construction problems. Those problems would eventually end up in abandonment of the projects.

Study by Sambasivam and Yau (2006) discovered several effects of construction delays such as time overrun, cost overrun, disputes, arbitration, litigation, and the most important one is total abandonment of the project at the end. Similarly, Aibinu and Jagboro (2002) found same effects with Sambasivam and Yau (2006). When there is cost overrun, it will make the project being extend, and it will called time overrun. Actually, the effect is connecting each other. So, we must avoid the problem to complete the construction.

In conclusion, from the studies mentioned above believe that the study of causes and effects of incomplete construction projects could help practitioners to improve and improsive their effectiveness in project management (Sambasivam & Yau, 2006). If there is any problem in construction, a site meeting should be held to clarify any misunderstanding issues. However, Ballard and Howell (1998) argued that construction planners should make this tasks do not meeting these criteria: (1) sufficiently well defined (to be coordinated with other work and the inputs to be identified and assembled); (2) are ready to start (material, design, and precedent works complete); (3) have priority in the critical path for delivery to the customer; (4) are commensurate in scale with the available labour for the coming week; and (5) are carried out within a system where the causes of incomplete or poor quality assignments are investigated and identified, should be deferred. Monitoring gives early advices of the probability of contractor’s delays and helps in anticipating the effects of changes that may be needed (Cleland, 1999; Abdul-Rahman and Berawi, 2002). As such, further research is needed to investigate the limitations and potential improvements to causes of incomplete construction.

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